

Arithmetic Progression

- 1: Find the 15th term of the arithmetic progression 3, 9, 15, 21,....?
- 2: Find the general term of the arithmetic progression -3, $-(1/2)$, 2....
- 3: Find the sum of the first 10 numbers of this arithmetic series: 1, 11, 21, 31...
- 4: If 11th term is 47 and first term is 7. What is common difference between them?
- 5: Find out the sum of this sequence 10,15,20,25,30,.....,100
- 6: The sum of the first 3 terms in an AP is 6 and that of the last 3 terms is 16. If the AP has a total of 13 terms, what is the sum of the middle three terms?

A.P WORD PROBLEM

1. The 10th and 18th terms of an A. P. are 41 and 73 respectively. Find 26th term.
2. If an A. P. consists of n terms with first term a and nth term l show that the sum of the nth term from the beginning and the mth term from the end is (a + l).
3. Find the second term and nth term of an A. P. whose 6th term is 12 and the 8th term is 22.
4. If the nth term of the A. P. 9, 7, 5.... is same as the nth term of the A. P. 15, 12, 9..... find n.
5. The nth term of an A. P. is $6n + 11$. Find the common difference.

SURDS AND INDICES

1. $(1000)^7 \div 10^{18} = ?$
2. $(0.04)^{-1.5} = ?$
3. $49 \times 49 \times 49 \times 49 = 7^?$
4. $(64)^{-\frac{1}{2}} - (-32)^{-\frac{4}{5}} = ?$
5. $(25)^{7.5} \times (5)^{2.5} \div (125)^{1.5} = 5^?$
6. If $\sqrt{2^n} = 64$, then the value of n is: